

BOROUGH of LEWES.

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

for the year

1945

by

G.M. DAVIDSON LOBBAN.

M.B., Ch.B., D.P.H.

Public Health Department,
Town Hall,
Lewes.

16th September, 1946.

PUBLIC HEALTH OFFICE,
TOWN HALL,
LEWES.

16th September, 1946.

To The Mayor, Aldermen and Councillors
of Lewes Municipal Borough.

Mr. Mayor, Aldermen and Councillors,

I beg to submit the Annual Report on the health of the inhabitants, and on the sanitary conditions of the Borough of Lewes for the year 1945.

This report is an abbreviated one, and all records, including statistics supplied by the Registrar-General, have been carefully preserved.

The estimated population of the town for 1945 was 11,530. This figure is calculated by the Registrar-General on the assumption that the movement of the population is likely to continue to follow the same general course that it has followed in the past. In inter-censal years, all rates based upon the population such as birth rates, death rates etc., are calculated with the estimated population figure. As a census is usually taken every ten years, the estimated population figures have to be used in such calculations for inter-censal years. The census figure for the population of Lewes in 1921 was 10,797.

There are good grounds for believing that the actual population for 1945 was greater than the estimated population figure of 11,530. Many people came into the town to reside during the year, particularly on being discharged from the services. A more exact calculation of the population could be obtained from the ration book figure which, so far, is being withheld from general publication.

The birth rate for the year 1945 was 16.73 per 1,000 population, as against 18.29 per 1,000 population in 1944.

In the year under review, the death rate was 13.4 per 1,000 population. This rate is not a heavy one, and is less than the death rate in 1944, which was 14.38 per 1,000 population.

The Infantile Mortality Rate, or the proportion of infants dying under one year of age, per 1,000 live births, was 41.45 as against a comparable figure of 46.04 for the year 1944. The Infantile Mortality Rate is a very important index of the social circumstances of an area. A high rate is usually associated with one or more of the following factors - overcrowding; bad housing; defective sanitation; adverse climatic conditions - together with maternal ignorance and neglect. The rate for England and Wales for 1945 was 46 per 1,000 live births, and for London the rate was 53 for the same year.

There were no maternal deaths in Lewes in 1945, and thus the maternal mortality figure was Nil.

Concerning infectious diseases, only one case of diphtheria was notified during the year with no death from this cause. During the last four years, nine cases of diphtheria were notified with one death. The fatal case was not immunised.

Picking out two years at random before diphtheria immunisation was used as a means of prevention of diphtheria, it is found that in 1918 and 1919 ten cases of diphtheria were notified with two deaths from this disease in the latter period. Other years previous to diphtheria immunisation show more cases of diphtheria notified. In 1929 there were 34 cases with one death. Ample proof has been given of the efficacy of diphtheria immunisation. Immunisation alone has been almost entirely responsible for the great reduction in the numbers of cases in recent years. As an effective preventive of diphtheria, it is unquestioned.

Fourteen cases of scarlet fever were notified in 1945 with no deaths attributed to this infection. Six of the cases were sent to hospital on account of bad housing of the patient, inadequate isolation at home or inability to look after the patient at home. The remainder of the cases were nursed at home.

A small outbreak of measles occurred in the Borough in 1945. In all, one hundred and eighty-eight cases were notified with one death. To send all measles cases to hospital, even during a small outbreak, would be impossible since there would not be the accommodation available. Isolation in hospital of measles cases does not check the outbreak of the disease, since before the rash appears the patient has usually infected others.

Ten cases of whooping cough were notified, with no deaths.

The rest of the infectious diseases - pneumonia, erysipelas, ophthalmia neonatorum and puerperal pyrexia notified in 1945 were small in number.

One case of cerebro-spinal meningitis was notified. Unfortunately the case had a fatal termination.

Concerning pulmonary tuberculosis, fourteen cases were notified during the year as against nine cases in 1944. In the comparable war and post-war years of 1918 and 1919, it was found that twenty-six cases of pulmonary tuberculosis were notified in 1918, and forty-three cases were notified in 1919.

Satisfactory in many respects though the year 1945 was as far as the physical health of the inhabitants was generally, in that there was no outbreak of dangerous infectious disease, and in that the Infantile Mortality Rate and the Maternal Mortality Rate were low ones, also bearing in mind the low incidence of diphtheria and scarlet fever, with the much lower figure for notified cases of pulmonary tuberculosis than for a corresponding period during and after the previous war, it has been apparent that the population has been affected through the stringencies and strains experienced during the recent war-time period.

There has been in 1945, and still continues to be, a certain apathy, lethargy, and irritability amongst some members of the general community. No doubt this is due to the strain of war-time and post-war conditions, to the absence of a generous, and still more, of a more varied diet. There appears to be a greater shortage of food, especially in variety in this part of the country than in other parts. The many frustrations caused by shortages of all kinds - of houses, of goods and materials necessary for normal living - have all had their cumulative effects. Other members of the community more robust or more philosophical in outlook, appear to have sustained the condition of strain well, although it is true to state that all have been affected more or less.

One fact remains clear, and that is that the optimum physical and mental well-being of the general population cannot be attained under a regime of long-continued, multitudinous, and vexatious restrictions.


I am,

Lady and Gentlemen,

Yours obediently,

G.M. DAVIDSON LOBBAN.

Medical Officer of Health.



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S E C T I O N I.

STATISTICS OF THE AREA - 1945.

Area (in acres)	1,981
Population	11,530
Number of inhabited houses	3,801
Rateable Value (estimated)	£121,378
Sum represented by Penny Rate	£487

EXTRACTS FROM VITAL STATISTICS

	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Rate per 1,000</u> <u>Population.</u>
Live Births				
Legitimate	84	88	172	
Illegitimate	12	9	21	
			193	16.73
Deaths	66	89	155	13.44
Number of women dying in, or in consequence of childbirth			Nil	
Deaths of Infants under 1 year of age (usually taken as the Infantile Mortality Rate)			8	<u>Rate per 1,000</u> <u>Live Births</u> 41.45

BIRTH RATE.

The birth rate in Lewes for the year under review was 16.73 per 1,000 population. The average annual birth rate for the years 1940 to 1944 was 15.15 per 1,000 population and for the years 1935 to 1939 it was 12.7 per 1,000 population.

The birth rate has been progressively decreasing in this country during the last seventy years. It has been evident to most that there has been an increasing proportion of old people in the population during the last few decades. This fact has not been lost upon business people concerned with industries and trades catering for the ageing and the aged. The publishing trade increased their output, since old people like to read. Clothing manufacturers have supplied more materials giving warmth, durability, and conservative styles. Dealers in easy chairs and wireless sets have flourished. Land and property in residential areas have increased in value. There appeared to be a contraction of the more robust games.

It is obvious that we are becoming a nation of old people, as we certainly are, due to the decline in the birth rate, and to the prolongation of life, a smaller proportion of young people will have inevitably to support a great number of the aged - almost a dying nation in fact.

There now appears to be a swing in favour of an increased birth rate. Whether this is due to a renewal of family life occasioned by insecurity and people withdrawing more into their own homes, or to pure recklessness, borne of insecurity and doubt, is not clear. Towards, or at the end of, a war of some years' duration there is nearly always a greater replacement of human stock. Psychical and emotional disturbances tend to a reversion to family life. It appears that the present increase in the number of births is of a temporary nature. There has been a deliberate artificial restriction of births for practical and economic reasons in the past.

In war years there have been higher wages awarded to certain sections of the community, and this has had some effect in ultimately producing a larger birth rate despite the controlled supplies of clothing, food, and other means of subsistence. Also, a large number of marriages of young men and women in the Forces have taken place.

It is clear that if wages come down the cost of living will have to come down with them. This includes the costs of all food and materials necessary for present day life. The severe strain to which some classes of the community have been subjected, such as occasioned by higher taxation, will have to be removed before any hope can be received, and they undertake the raising of a family.

There are many legal, social, and economic reforms which are overdue, and which have a great bearing upon an increased birth rate in this country. To mention but a few, there are the cuts in the continued rationing of the nation's food supply; the withholding of labour for agriculture, and for the distribution of food; various rings which keep up food prices and prices of materials; the expensive methods of distribution of food stuffs and materials necessary for subsistence; shortage of houses; high rents in some cases and high prices of houses; restrictions in tenancy agreements to the exclusion of children; expensive education, and many other restrictive factors militating against the upbringing of a family.

Despite all these deterrents there has been, as I have stated earlier, a temporary swing over in favour of an increased birth rate. One could speculate upon how much more the increase would have been if conditions, such as shortage of housing accommodation, lack of furnishing and household equipment, diminished supplies of clothing, and of woollen and cotton materials, and high taxation - all factors which increase - were removed.

It is obvious that to regain our place as a premier exporting nation we will have to work extremely hard. Young people will be required to make good the wastages of war in life, material, and wealth. Foreign investments returning over three hundred million pounds annually to this country, which offset a large percentage of our imports, have gone. Prudence and industry over many years created the vast capital required for such a dividend which made the cost of living a cheap one before the war. It is clear then that only prudence and industry can bring back conditions akin to those of the pre-war period.

Any propaganda as to easy living without working which does not take into account hard facts, is misleading and may be fertile in future unrest and defeat its own end - security - since unrest will bring insecurity.

Nevertheless, it seems paradoxical that in the recent past we have been striving to produce plenty so that there should be no want of certain essentials for a full and contented life. Instead of plenty, poverty of these essentials has been too evident. One cannot say that domination of our lives by the machine has made us happier. I am certain that the average man or woman in this country is more contented to receive money which he or she has justly earned by their own work or endeavour. Moreover, self respect is so retained. A life of dull monotonous ease depending upon the State for nearly everything would be resented by most.

Whilst bearing in mind the very important fact that there has been a progressive decline in the birth rate in this country over many years, it may be of interest to compare the temporary increase in the numbers of births in the war years with the numbers of births in pre-war years in the town of Lewes. By such comparison a more simple perspective is given than if one compares the annual birth rates of those years.

Of much more significance, the growth of the population in its chief aspect in this borough in a given period can be given if the annual numbers of births and the annual numbers of deaths are stated within defined periods and a simple calculation is made for each year of the birth-death ratio, i.e., $100 \times \frac{\text{births}}{\text{deaths}}$ and the results shown. These results are called the vital indices. The vital indices are so used to designate that measure of a population's condition given by the ratio of births to deaths within a given time, and they may be fairly said to furnish a more adequate picture of the net biologic state of a population as a whole than any other statistical figure.

If the vital index, or the ratio $100 \times \frac{\text{births}}{\text{deaths}}$ is greater than 100, the population is growing, and in so far it is in a healthy condition. If it is less than 100, the population is, biologically, not holding its own.

The pre-war years 1934 to 1939 are taken in the first table given hereunder:-

Year	Numbers of births	Numbers of deaths	Ratio $100 \times \frac{\text{births}}{\text{deaths}}$
1934	126	133	94.73
1935	132	134	98.50
1936	160	164	97.56
1937	158	161	98.13
1938	145	177	81.92
1939	168	153	109.80
Total	889	922	96.42

From the above table it can be seen that, with the exception of the year 1939, the ratios, or vital indices, are all below 100. Unless the births exceed the deaths, so that the vital indices are above 100, the population cannot be held to be in a progressive and healthy state. Fundamentally and innately, the condition as revealed in the years 1934 to 1939 as a whole cannot be held to be a sound one from a biologic point of view. Moreover, in this period there was not a sufficient immigration of new residents at the younger ages into the town to make up for the deficiencies of births.

Now, taking the war years 1940 to 1945, and giving the numbers of births, the numbers of deaths, and the vital indices for each year are as under:-

Year	Numbers of births	Numbers of deaths	Ratio $100 \times \frac{\text{births}}{\text{deaths}}$
1940	165	178	92.69
1941	195	186	104.83
1942	203	164	123.78
1943	191	176	108.52
1944	215	169	127.21
1945	193	155	124.51
Total	1162	1028	113.03

It will be seen that, with the exception of the year 1940, the vital index in each year is above 100. Taken over the whole period, 1940 to 1945, this then is a healthy state of affairs.

It can be observed also that the total number of births in the war years (1940 to 1945 - 1,162) exceeds the total number of births in the pre-war years (1934 to 1939 - 889) by 30%; whilst the total number of deaths in the war years (1,028) exceeds the total number of deaths in the pre-war years (922) by 11.5%.

In view of the obvious significance of the birth-death ratio, or the vital index, of a population, it is rather surprising that little attention has been paid to it in this country. It is a highly sensitive measure of the immediate biological state in the evolutionary sense of a population or group of people.

It is indisputable that the birth rate in this country has been progressively declining during the last seventy years, whilst, owing to improved Public Health measures, and improved medical and surgical skill, treatment, and technique, the chances of an infant surviving until adult life has also increased during that time. At the same time adults are now living much longer. We are thus faced with an ageing population with fewer replacements as the years go on.

The population of a town, such as Lewes, is kept up mainly by the replacements, i.e., the births, rather than by new residents. A healthy condition as regards the population can only be maintained in the town if the state of affairs of the annual number of births being greater than the annual number of deaths, and, of course, there is a considerable and constant influx of new residents. That these new residents should be, in the majority, young people is obvious. There is, and should be also room for the older age groups.

Usually the increase of births in war years and in the immediate post-war years is sporadic and not continued.

DEATH RATE

The annual crude death rate in Lewes for 1945 was 13.44 per 1,000 population. In all there were 155 deaths in the year as follows:-

	<u>Male</u>	<u>Female</u>
Influenza	1	1
Measles	0	1
Tuberculosis of Respiratory System	4	2
Cancer, Malignant Disease	14	8
Intra-Cranial Vascular Lesions	10	13
Heart Disease	18	28
Bronchitis	5	4
Pneumonia (all forms)	3	3
Other Respiratory Diseases	0	1
Ulcer of the Stomach (or Duodenum)	1	0
Diarrhoea under 2 years	0	2
Appendicitis	1	0
Other Digestive Disorders	1	5
Nephritis	3	2
Congenital Malformation: birth injuries: infantile diseases	0	2
Suicide	0	1
Other Violent Causes	1	0
All other Causes	4	16
	<u>66</u>	<u>89</u>

Of all the causes, deaths from heart disease (46) took premier place. Cancer took next place as a killing disease with 22 deaths. This was followed by deaths from intra-cranial vascular lesions

(mostly 'stroked'), numbering 23. Then come deaths from bronchitis (9); pulmonary tuberculosis (6); pneumonia (6); other digestive disorders (6); nephritis (5); congenital deformities at birth, birth injuries, etc., (2); influenza (2); diarrhoea under 2 years (2); ulcer of the stomach, or duodenum (1); measles (1); appendicitis (1); suicide (1); other violent causes (1); other respiratory diseases (1); deaths from all other causes not specifically mentioned above, numbered 20.

SPECIFIC CAUSES OF DEATH

1. Heart Disease. As in former years heart disease caused the largest number of deaths in 1945. "Heart Disease" is composed of a large number of highly diverse conditions and diseases. From 2% to 2.5% of applicants for life insurance are rejected on account of heart disease. Besides shortening life, heart disease is responsible for much disability and invalidism. Not all heart lesions are fatal. As to the prevalence of heart disease, there is little difference according to occupation, and comprehensive knowledge concerning its prevalence, and different causes is lacking. This points to a good deal of further research being required, especially in view of the leading place heart disease occupies year after year as a cause of death, and as a cause of a great deal of disability.

2. Intra-Cranial Vascular Lesions. Deaths from intra-cranial vascular lesions took the second place in 1945 as a cause of death. This place is usually occupied by deaths from cancer each year. These vascular lesions are usually cerebral haemorrhage. In some families there is a tendency to degeneration of the blood vessels. These degenerated vessels are then more liable to burst, haemorrhage so produced from the cerebral blood vessels thus causes an intra-cranial vascular lesion. Predisposing factors are nephritis, alcoholism, chronic muscular strain and high blood pressure; the latter due to a variety of causes, such as the hypertension of present day life.

3. Cancer. Cancer is a general term covering all malignant tissues of different kinds of cancerous affection. There is some connection between modern conditions of living and the increase of cancer, but the actual cause of cancer has not so far been discovered. It seems clear, however, that chronic irritation may induce cancer in susceptible persons. Thus we have cancer in shale oil workers, bad cancer in chimney sweeps, and in x-ray workers. Many cases of cancer can be cured if treated early enough. The popular misconception that cancer is always a hopeless and incurable disease is not correct. At first cancer appears to be local and, therefore, curable, if detected in time and removed.

4. Bronchitis. This affection may be primarily due to exposure, or secondarily, following upon a common cold, tonsillitis, laryngitis, or associated with influenza or some of the infective fevers - measles, whooping cough, etc. In old people it may be associated with heart disease, kidney disease, or other lung affections, such as pneumonia. Both acute and chronic bronchitis require medical supervision and should not be neglected.

5. Pulmonary Tuberculosis. The death rate from pulmonary tuberculosis in Lewes for 1945 was 0.52 per 1,000 population. Deaths from this disease have been declining in recent years, whilst the percentage of cures have been increasing, due to the advances in treatment and to the early examination of contacts.

It cannot be too deeply emphasized that a person suffering from tuberculosis in an infectious state is a danger to his own family and to the community at large. All such cases should in their own,

and in others', interests undergo treatment at a Sanatorium. A Government Scheme is in existence whereby patients being treated for pulmonary tuberculosis in a sanatorium for an adequate length of time, can receive allowances, and these greatly allay what is perhaps a major anxiety - financial commitments.

In some cases there appears to be a reluctance on the part of contacts of pulmonary tuberculosis cases to be medically examined. The percentage of contacts so examined who reveal tuberculosis is extremely low. In some years it is almost infinitesimal, in others zero. At the worst, to be diagnosed as suffering from pulmonary tuberculosis need no longer be taken as a sentence of death, since the percentage of cures is high.

6. Pneumonia. Pneumonia in Lewes does not rank so high in the list of killing diseases as it does in northern industrial areas, and in congested towns. This disease, the incidence of which is highest in winter and spring, is sometimes associated with influenza. Debilitating conditions predispose towards it.

7. Nephritis. Acute nephritis may be caused through a chill or may be associated with scarlet fever, measles, or diphtheria. Toxic agents, such as turpentine and carbolic acid are other causes, and it may be associated with pregnancy. Acute nephritis cannot be regarded as infectious.

During 1945, there were no deaths from diphtheria or from any other notifiable infectious diseases, with the exception of measles (1 death). Also there were no deaths from diabetes; from non-pulmonary tuberculosis, or from road traffic accidents. The maternal mortality, or deaths in women from causes associated with childbirth, was nil.

A Common Ailment. The common cold, from the point of view of loss of time at work, is the most important cause of sickness. It is computed that during the months November to March almost a fifth of the persons exposed to risk suffer from colds.

A cold is the most common ailment; never fatal in itself, it may pave the way for other more serious infections, as pneumonia, or as sinus or ear trouble. Due to its variable manifestations in different persons, it appears that a cold is not a truly clinical entity. Rather it seems that there are a number of different infecting agents causing different effects but all roughly classified under the term "a common cold". Not a great deal is known about the different infecting agents. Some infections are ascribed to a very small virus which can pass through an extremely fine filter.

Undoubtedly colds are transmitted from person to person. It has been noted that individuals who have been isolated from civilisation have been free from colds, and infection has occurred as soon as contact with the outside world has been established. At present, the only known proved cause of a cold is a filter passing virus, but it is probable that in the future some of the other causes of colds will be exactly identified.

An individual with a cold is most infectious in the early stages. The infection of other people occurs through coming in contact with spray charged with the germs which escape from the infected person during sneezing or even talking. Thus, minute infectious droplets are let loose. The incubation period of colds appears to be one to three days. Amongst individuals susceptibility to colds varies greatly. It has been suggested that a person is more susceptible if the nasal secretion is acid, or if there is a lack of vitamin intake. Exposure, chilling, fatigue, and malnutrition are contributory factors.

Cases of colds should be isolated to avoid infecting others. There is no doubt that a patient with a cold is very infectious during the early and acute stages. In general, the exclusion from school or work for four or five days would be unreasonable as by long exclusions school attendance and work would be interfered with too much. To minimise the ill effects of a cold rest in bed is best to accomplish this.

Although it is the commonest ailment, a cold, although thought not much of by the majority, may lead to a more serious complaint.

Vaccines have been used to immunise a person against developing colds. Favourable results have been reported when such vaccines have been administered more or less indiscriminately. Well controlled experiments, however, such as the administration of milk sugar, a substance with no known curative properties, a placebo in fact, to an unsuspecting control group of persons, have shown that the reduction in the incidence of colds in the group where vaccines were used was not substantially greater than in the control group given the innocent substance, milk sugar. Occasionally one finds an individual who has suffered from repeated colds and has declared great benefit after vaccine treatment. It is likely that the benefit may have arisen, however, not through the treatment but simply after it. A vigorous and healthy body is more ready to withstand the effects of a cold than a sickly and debilitated one. Vitamin tablets, cold baths, and exercise are not of proved value in themselves, but they help to raise the bodily resistance somewhat.

Much more research is required before the different infecting agents and the contributory factors causing colds can be understood. Many diverse conditions are being roughly classified and put under the broad heading of colds at present. Until the actual causative agents and contributory factors are clearly identified, not much further progress in the nature of preventatives and cures can be made. It is only after much successful research in clearing up the very complicated matter of tracking and clearly identifying the exact causes that real progress can be made in the prevention and cure of the commonest of all common ailments - the so-called "common cold".

NOTES ON STATISTICS

Death rates and causes of deaths are useful and necessary when comparing one period with another in a more or less stable population or in comparing the figures in almost identical communities. They also help in research concerning various diseases.

It is more necessary, however, to have full access to statistics concerning the living. Already one can readily see whether the incidences of different notifiable infectious diseases are increased or decreased for certain months or years, as these statistics are available.

Statistics concerning the number of living people suffering from heart disease, cancer, rheumatism, gastric ulcer, kidney disease and other diseases, each of which causes disablement and loss of health and efficiency, are not so readily available to Public Health Administrators, although one can obtain a good deal of this information from National Health Insurance Files.

If it is the intention to carry out a national public health scheme for the prevention of disease, such statistics of the living would lead to a closer conception of the extent of the disease, the age, sex, seasonal variations and other factors, such as employment, bearing upon each malady, and thus help materially in research and in the discovery of curatives and, better still, in prevention.

The practical advantage gained by the compilation and use of vital statistics is immense. Public Health matters which were fiercely debated one hundred years ago and on which only a very shrewd and experienced medical man could form an opinion, are now within easy compass.

Birthrates, Civilian Death-rates, Analysis of Mortality, Maternal Mortality and Case-rates for certain infectious diseases in the year 1945. Provisional figures based on weekly and quarterly returns.					
	England and Wales	126 C.Bs. and Great Towns, including London.	148 Smaller Towns; Resident Pop: 25,000 to 50,000 at 1931 Census.	London Administrative County.	Lewes
* Rates per 1,000 Civilian Population.					
Live Births	16.1 £	19.1	19.2	15.7	16.73
Still Births	0.46 £	0.58	0.53	0.40	0.26
Deaths:-					
All Causes	11.4 £	13.5	12.3	13.8	13.44
Typhoid and Paratyphoid	0.00	0.00	0.00	0.00	0.00
Scarlet Fever	0.00	0.00	0.00	0.00	0.00
Whooping Cough	0.02	0.02	0.01	0.02	0.00
Diphtheria	0.02	0.02	0.02	0.01	0.00
Influenza	0.08	0.07	0.07	0.07	0.17
Smallpox	0.00	0.00	0.00	0.00	0.00
Measles	0.02	0.02	0.02	0.01	0.08
Rates per 1,000 Live Births:-					
Deaths under 1 Year of Age	46 £	54	43	53	41.45
Deaths from Diarrhoea & Enteritis under 2 years of age	5.6	7.8	4.5	7.6	10.36
£ signifies per 1,000 related births £ signifies per 1,000 Total Population.					
NOTIFICATIONS Rates per 1,000 Civilian Population					
Typhoid Fever	0.01	0.01	0.01	0.01	0.00
Paratyphoid Fever	0.01	0.00	0.01	0.00	0.00
Cerebro-Spinal Fever	0.05	0.05	0.05	0.06	0.08
Scarlet Fever	1.89	2.02	2.03	1.57	1.21
Whooping Cough	1.64	1.65	1.47	1.25	.86
Diphtheria	0.46	0.52	0.56	0.34	.08
Erysipelas	0.25	0.28	0.24	0.31	.43
Smallpox	0.00	0.00	-	0.00	0.00
Measles	11.67	10.89	11.19	9.03	16.30
Pneumonia	0.87	1.03	0.72	0.78	.43
Rates per 1,000 Total Births (Live and Still):-					
(a) Notifications:-					
Puerperal Fever	19.93	12.65	8.81	(3.60	
" Pyrexia)				(15.87	5.18

(b) Maternal Mortality - England and Wales:-

No.140 Abortion with Sepsis	No.141 Abortion Without Sepsis	No.147 Puerperal Infections.	Nos.142-6 148-150 Other	Lewes
0.25	0.08	0.24	1.22	0.00
Abortion:- Mortality per million women aged 15.45 - England and Wales:-				
No.140 With Sepsis	No.141 Without Sepsis		Lewes	
18	6		0.00	
* Including Puerperal Fever				

SECTION II.
GENERAL PROVISION OF HEALTH SERVICES
IN THE AREA.

1. Public Health Facilities of the Local Authority.

The Medical Officer of Health for the Borough of Lewes is also the Medical Officer of Health for the Seaford Urban, Newhaven Urban, and Chailey Rural District Councils.

Normally two Sanitary Inspectors carry out their duties in the Borough.

2. Laboratory Facilities.

These are provided by the Clinical Research Association at Hilton's Annexe, South Road, Haywards Heath. Particulars of examinations carried out during the year 1945 are as follows:-

	<u>Positive</u>	<u>Negative</u>	<u>Doubtful</u>	<u>Total</u>
Swabs for Diphtheria	-	31	-	31
Miscellaneous Examinations.	-	-	-	-

3. Ambulance Facilities.

(a) For Infectious Diseases Cases. Under agreement a motor ambulance is provided by the Lewes, Newhaven & Seaford Joint Hospital Board for the transport of cases of infectious diseases.

(b) For Non-Infectious Cases. The St. John Ambulance Brigade provides two motor ambulances for the removal of accident cases and cases of illness requiring hospital treatment.

(c) For Tuberculous Cases. Facilities for the transport of patients by motor ambulance are provided by the East Sussex County Council.

4. Nursing in the Home.

Home nursing is carried out by the East Sussex County Nursing Federation through the Lewes and District Nursing Association.

5. Clinics and Treatment Centres.

The following is a list of Clinics and Treatment Centres available for Lewes residents during 1945:-

<u>Description & Situation.</u>	<u>Day and Time of Attendance.</u>	<u>By whom Provided.</u>
Dental Clinic (Welfare Cases) Castlegate House.	Mondays 2 p.m. with exception of 4th Monday	E.S.C.C.
Tuberculosis Clinic Castlegate House	Tuesdays 10.30 a.m.	E.S.C.C.
Maternity & Child Welfare. St. Michael's Hall.	Tuesdays 2 p.m.	Voluntary & E.S.C.C.

Description and Situation.	Day and Time of Attendance.	By Whom Provided.
Orthopaedic Clinic, Castlegate House.	Tues: & Thurs: 2 p.m. Saturdays 10 a.m.	E.S.C.C.
Artificial Pneumothorax. Castlegate House.	Wednesdays 10 a.m.	E.S.C.C.
Artificial Light. Castlegate House.	Mondays & Thursdays 9.30 a.m.	E.S.C.C.
Ante-Natal Clinic. Castlegate House.	1st & 3rd Fridays & 4th Monday at 2 p.m.	E.S.C.C.
<u>SCHOOL CLINICS</u>		
(a) Minor ailments. Market Tower	Monday to Friday 9 a.m. to 12.30 p.m.	County Education Committee
(b) Dental Clinic. Market Tower.	Mondays & Thursdays 9 a.m. to 12.30 p.m.	Ditto.

6. Hospitals - Public and Voluntary.

<u>Name and Situation</u>	<u>Type</u>	<u>No. of beds Available.</u>	<u>Management</u>
<u>A. Within the Borough</u>			
Victoria Hospital, Nevill Road, Lewes.	General	32 beds 3 cots	Voluntary.
<u>B. Outside the Borough</u>			
Lewes. Newhaven & Seaford Joint Infectious Diseases Hospital, Gibbon Rd. Newhaven.	I.D. Hospital.	20 beds.	Lewes, Newhaven & Seaford Joint Hos: Board.
Public Assistance Hospitals:-			E.S.C.C.
South Common, Chailey	General	96 beds	
Uckfield Institution	General	62 beds	
Newhaven P.A.H.	General	71 beds	
Southlands Hospital, Shoreham.	General & Maternity	450 beds	

In addition to the above, patients from Lewes are treated at the Brighton Institution, the Royal Sussex County Hospital and the Children's Hospital, Brighton.

7. Poor Law Medical Aid Relief.

The arrangements in operation for the provision of medical assistance for those in poor circumstances are made by the East Sussex County Council.

8. Institutional Provision for the Care of Mental Defectives.

The East Sussex Mental Hospitals Board deal with the Lunacy and Mental Deficiency services.

9. Legislation in Force.

- (a) Private Acts.
- (b) Adopted Acts.
- (c) Public Health Acts.
- (d) The following Bye-Laws:-

Bye-Laws made on the 2nd August, 1882 with respect to:-
New streets and buildings (subsequently repealed by Section 60 of Bye-Laws made 4th February, 1925, with respect to New Streets and Buildings and Water Closets, etc., in connection with buildings);

The cleansing of footways and pavements;

Nuisances; Common Lodging-Houses; and Slaughter-houses.

Bye-Laws made on the 15th March, 1907, with respect to the paving of yards and open spaces in connection with dwelling houses and the keeping of water closets supplied with sufficient water for flushing (subsequently repealed by Section 60 of Bye-Laws made on 4th February, 1925, with respect to New Streets and Buildings and Water Closets, etc., in connection with buildings).

Regulations made on the 2nd January, 1907 with respect to Dairies, Cowsheds and Milkshops.

Order under Shops Act, 1912, made on the 2nd February, 1916 with respect to the hours of closing of shops.

Bye-Laws made on the 4th February, 1925, with respect to New Streets and Buildings, and Water Closets, etc., in connection with buildings.

Bye-Laws made on the 1st January, 1930, re Nuisances by Dogs.

Bye-Laws made on the 4th May, 1934, as to preventing the waste, undue consumption, misuse or contamination of water and conditions of supply.

SECTION III.

SANITARY CIRCUMSTANCES AND SANITARY INSPECTION OF THE AREA.

1. WATER SUPPLY.

The Water supply is derived almost entirely from the Lewes Corporation Waterworks. Some private wells are still being used.

The Corporation Waterworks are situated at the South-West end of the Town. The water is pumped from the well into the four covered distributing reservoirs, i.e., Jubilee Park: the Race Hill (2) and Western Road.

(i) The supply is constant, of good quality and sufficient for the needs of the community.

(ii) The Public Analyst took during the year samples of water from the Lewes Well - quarterly for chemical and bacteriological examination, and monthly for examination for organisms of the Coli Group. The following is a copy of one of his reports:-

"5th. May 1945.

Report upon a sample of water taken by me on the 30th. April 1945.

Sample labelled: Lewes Well.

The water on arrival had the following characteristics:-

Colour.	-	None.
Smell.	-	None.
Sediment.	-	None.

Chemical Analysis afforded the following:-

	<u>Grains</u> <u>per gallon.</u>	<u>Parts</u> <u>per million.</u>
Total solids (dried at 100° C)	23.8	
Solids (after ignition).	18.4	
Chlorine.	1.6	
Ammonia (free)		.018
Ammonia (albuminoid).		.036
Oxygen taken from permanganate in $\frac{1}{4}$ hour.	Nil.	
Oxygen taken from permanganate in 4 hours.	Nil.	
Nitrogen as Nitrates and Nitrites.	.23	
Nitrites.	Nil.	
Hardness (total).	13.2	
Hardness (after boiling).	4.0	
Phosphates.	Nil.	
Metallic impurity.	Iron. .01	
PH.	7.3	

Bacteriological Examination.

The organisms per ml. which grew on Nutrient Agar in three days at 22° C. under aerobic conditions and were then visible to the naked eye as colonies numbered ... 0.

On Agar at blood temperature and under aerobic conditions colonies were noticed after two day's incubation ... 0

Probable number of Coli-Aerogenes organisms in 100 ml. of the original water ... 0.

Report.

Both chemically and bacteriologically this water is highly satisfactory. I am of opinion that it is perfectly safe for drinking purposes and very suitable for a Public Supply.

(Signed) R. F. Wright.

Public Analyst."

(iii) As the water supplied from the Lewes Well is not liable to have plumbo-solvent action, it has not been necessary to take any precaution against contamination by lead.

(iv) Also no other form of contamination of the supply has occurred during the year.

(v) In conclusion, all dwelling houses in the Borough have a direct piped supply from the public water mains, with the exception of 10 houses which receive their supply from private wells, but this is also piped direct to these houses.

2. DRAINAGE AND SEWERAGE.

Water carriage system; 53 houses only being connected to cesspools.

The sewerage system provides for the converging of all sewers to a central station at Southerham where the effluent, after the passing of the sewage through screens and settling tanks, is discharged into the River Ouse at suitable states of the tide.

3. RIVERS AND STREAMS.

No statutory proceedings to prevent pollution of rivers or streams were necessary during the year.

4. CLOSET ACCOMMODATION.

Water closet; part hand flushed but chiefly by flushing cistern.

5. SCAVENGING.

The collection of house refuse is carried out once a week over the whole district.

The disposal of the refuse takes place at the Council's Sewerage Works on the outskirts of the town and is utilised for filling up the low-lying adjacent ground.

6. SANITARY INSPECTION.

(a) Visits and Inspections:-

Houses and premises inspected.	-	112
Complaints attended to.	-	99
Visits to Slaughter Houses.	-	13
Visits to Knacker Yards.	-	12
Visits to Cowsheds and Milkshops.	-	50
Visits to Bakehouses.	-	6
Visits to Fried Fish and other food shops.	-	109
Visits re. defective drains.	-	42
Drains tested by smoke or colour.	-	3
Drains tested by water.	-	15
Visits for sundry purposes.	-	216

Visits under the Factories Act.	-	24
Visits regarding sickness.	-	38
Patients removed to hospital.	-	12
Visits regarding disinfection.	-	17
Rooms disinfected.	-	26
Inspections of verminous houses.	-	19
Houses disinfested.	-	20
Visits regarding Rodent Control.	-	385
Visits to Stables.	-	2
Samples of Milk.	-	14
Inspections re Petroleum Acts.	-	15
Inspections of Marine Stores.	-	4
Inspections of Pig Keepers' premises.	-	7

(b) Nuisances Abated and Repair Works carried out:-

Choked drains.	-	13
Drains relaid or repaired.	-	15
W.C's. repaired or reconstructed.	-	19
Sinks.	-	3
Sink waste pipes.	-	3
Eaves guttering and rainwater pipes.	-	2
Ashbins provided.	-	16
Doors and door-frames.	-	3
Fireplaces and ranges.	-	7
Floors.	-	11
Roofs.	-	13
Ceilings and internal walls.	-	17
Window frames.	-	4
Dampness remedied.	-	10
Rooms cleansed.	-	7
Verminous houses.	-	12
Accumulations removed.	-	10

7. INSPECTION AND SUPERVISION OF FOOD.

(a) Milk Supply.

There are only three cowkeepers within the Borough; the greater supply of the milk is drawn from without.

Fourteen samples of milk were submitted for bacteriological examination: two proved to be unsatisfactory.

Both retailer and producer premises were kept in a generally clean condition.

(b) Meat and Other Foods.

Apart from the occasional slaughtering of a pig for home consumption, no other slaughtering has taken place in the registered slaughterhouses.

Inspections of food premises have been made regularly during the year and satisfactory conditions have been maintained.

Owing chiefly to conditions prevailing, a certain amount of food was found on inspection to be unfit for human consumption and was voluntarily surrendered by the owners on condemnation. The following table shows details of food condemned:-

Tinned Meats (all kinds)	-	440½ lbs.
Brawn.	-	6 lbs.
Sausages.	-	120 lbs.
Bacon.	-	19 lbs.
Cooked ham.	-	10½ lbs.

Fish (all kinds).	-	562 lbs.
Eggs.	-	968
Butter.	-	92 lbs
Cheese.	-	10 lbs.
Margarine.	-	4 lbs.
Jam.	-	34 lbs.
Mixed Cereals.	-	448 lbs.
Tinned Milk (all kinds).	-	62 Tins.
Tinned Fish (all kinds).	-	65 Tins.
Tinned Groceries (mixed).	-	48 Tins.
Assorted Items.	-	7 Jars.

8. RODENT CONTROL.

Treatment of infested premises has been carried out during the year. The premises previously heavily infested, i.e. those adjoining the cut at the lower end of Soap Factory Lane, have been treated and kept in hand.

The Refuse Tip, Ham Lane, has received constant attention by this Department.

During the year, 385 premises were visited, and 28 were found to be rat infested and 10 mice infested. 39 Infestations were cleared, resulting in an estimated kill of 1,050 rats. Mice killed totalled 455.

9. ERADICATION OF BED BUGS.

12 Instances of bug infestation were found during the year, all of which were successfully treated. The method of disinfection varied between the use of vermicide solution or efficient fumigation, together with (in some cases) removal of skirtings, architraves and other wooden fixtures from walls and treatment by blow-lamp.

10. SWIMMING BATHS.

The open-air Swimming Bath at the Pells is owned by the Council. The bath is completely emptied, cleansed and refilled fortnightly; also the condition of the water is maintained by regular chlorination and the daily changing of a volume of the water.

SECTION IV.

PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

INCIDENCE OF NOTIFIABLE INFECTIOUS DISEASES (excluding Tuberculosis), DURING THE YEAR 1945.

<u>Disease.</u>	<u>Total Cases Notified.</u>	<u>Cases Admitted to Hospital.</u>	<u>Total Deaths.</u>
Diphtheria.	1	1	-
Scarlet Fever.	14	6	-
Whooping Cough.	10	-	-
Measles.	188	-	1
Erysipelas.	5	-	-
Pneumonia.	5	-	-
Ophthalmia Neonatorum.	1	-	-
Puerperal Pyrexia.	1	-	-
Cerebro-Spinal Meningitis.	1	1	-

INFECTIOUS DISEASES GENERALLY.

1. Scarlet Fever.

There were 14 cases of scarlet fever notified during 1945. None of these cases died. Of the notified cases, 6 were removed to hospital for treatment.

Scarlet fever has become a mild disease in recent years, and it is very rarely that a severe case occurs. The concept regarding scarlet fever has been changed in recent years; the disease is not a clinical entity, it is an acute streptococcal infection of the naso-pharynx. Some cases show a rash and other clinical signs, others do not. In many cases the only symptom is a slight sore throat with no rash and no obvious subsequent peeling. These cases are missed cases of the disease, and they are allowed to mix with other individuals and infect them. Some cases carry infectious organisms in the nose and throat without actually showing any signs or symptoms of the disease, and these are termed "carriers" and act as sources of infection also. Thus a number of missed cases and "carriers" not having been isolated have been at large and infected susceptible persons with whom they have come into contact.

The old theory that hospital isolation would stamp out the incidence of the disease has been exploded, and there is no evidence to show that it is an important factor in controlling an epidemic.

Where a case of scarlet fever cannot receive proper isolation, medical attention and nursing at home, removal to an Isolation Hospital becomes necessary, as this course often keeps down the incidence of the disease.

2. Diphtheria.

Only one case of diphtheria was notified in 1945. In 1935 fifteen cases were notified. During the last four years, only nine cases were notified altogether. In recent years, cases of diphtheria have been rare. This is due to almost one thing, and one thing alone - Immunisation - consisting of two single

injections of immunising fluid into the arm of each child whose parent or guardian was prudent enough and wise enough to have this done.

When one recalls that not so long ago diphtheria was a scourge and responsible for many of the deaths of children of all ages, with two-thirds of the diphtheria deaths occurring in those under five years, and the remaining third in children between five and fifteen years, immunisation can be rightly termed a Godsend.

In 1941 an extensive Diphtheria Immunisation Campaign began in Lewes. This was kept up with the result that a large percentage of the children have been effectively protected against diphtheria. At the end of 1945, 73% of children under five years, and 75% of children between five years and fifteen years, were so protected against the deadly disease, which occurs at all seasons, and will attack any child who is not immunised.

The position, good though it is, can be improved. New generations of children keep arriving through births. Parents and guardians, who, through one reason or another, have not had the children under their care immunised yet, are most seriously advised to have the children immunised as soon as possible. The children themselves have very little say in the matter, and it is every child's right to be so protected against such an often-times fatal disease. Some parents and guardians say that some children never get diphtheria, so why worry? Any child may get diphtheria, unless it is effectively immunised.

All parents and guardians who wish to have the children (for whom they are responsible) immunised, should either go to their family doctor to have this done, or make arrangements either by writing or by calling at the Public Health Department, Town Hall, Lewes. Delay is dangerous. Every child should be immunised. By so doing, parents and guardians would save themselves a lot of worry and anxiety, and they would have the solid satisfaction of knowing that the children are protected against a very deadly disease.

3. Pneumonia.

Five cases of pneumonia were notified during the year 1945.

Pneumonia attacks persons of all ages and is the most prevalent and fatal of all acute infectious diseases. Although it is an infectious disease, the infecting organisms may be in different guises, making the condition all the more difficult to treat. If the organism causing the infection is found early on in the disease, and treatment is instituted quickly, probably many more cases would not reach a fatal termination.

Nearly all the cases of pneumonia should be sent to hospital, since most require careful medical treatment, skilled nursing and isolation from other people.

Sulphonamide drugs - such as M & B 693 - have had a great effect in reducing the mortality in certain types of pneumonia and Penicillin has proved to be an even better remedy.

4. Measles.

There were 188 cases of measles notified to the Public Health Department in 1945, one of which proved fatal.

This disease is an acute infection of a few days' duration, and is characterised by fever, rash and symptoms referable to the upper respiratory tract. Middle ear infection and pneumonia constitute the chief complications. Pneumonia is responsible for

most of the deaths attributable to measles. Less than one per cent of measles cases die from it, although the mortality rate of small children and adults is somewhat higher. The disease is most prevalent in early spring and usually disappears rapidly with summer's advent.

Active cases of the disease form reservoirs of infection and there is no evidence that healthy or convalescent carriers exist. The escape of the infecting organisms is affected through respiratory secretions being expelled by the patient. Individuals are thus infected by breathing in small infected droplets of the secretion propelled into the air by an active case in talking, sneezing and coughing. Generally, communicability ceases by the time the rash appears. By the time the rash has disappeared, communicability or chance of infection of others has certainly ceased, even though the case has developed middle ear disease or pneumonia, both of which are due to other kinds of organisms than the organism responsible for measles itself. There is no evidence that the disease is spread by clothing, water, milk, food or flies.

The proportion of children who have had measles, and are therefore immune to it, varies with the opportunities for exposure. A higher percentage of children are found in crowded urban areas than in sparsely populated rural areas.

Theoretically isolation of a case of measles is designed to prevent the spread of the disease to others. In practice it serves more to protect the patient against sundry infections which may lead to pneumonia. Rigid isolation at home, where there is a large family, can do little to prevent the spread of measles through the family, as most of the children have already been infected before the rash appears and thus usually before the first case is recognised as measles. Such primary cases are followed by infection of 90 to 100 per cent of the susceptible siblings.

The prevention of pneumonia is the most important measure in measles. This does not reduce the number of cases but it does reduce the number of deaths.

Good nursing care is desirable for all measles cases and is especially important for those of pre-school age. All cases cannot be sent to hospital since during epidemic times, and in years with even moderate outbreaks, there would not be enough beds to cope with the situation.

Passive immunisation against measles, possible only if the child has had a known exposure, may achieve a modification of the disease. This modification apparently confers as lasting a protection as the typical measles infections besides lightening the signs and symptoms, and lessening the chance of contracting complications, such as pneumonia. The chief use of passive immunisation is in dealing with family contacts, especially those under three or five years of age. Active immunisation, or the immunisation of healthy children unexposed to measles infection, which is the introduction of a substance into the body to produce what is termed "an anti-body" in the human tissues to resist the infection, is of doubtful value.

5 Whooping Cough.

In 1945, ten cases of whooping cough were notified.

This disease is an acute infection of the respiratory tract and may last for a period of several weeks to two or three months. Most cases occur during the latter part of the pre-school period - from three to five years.

Formerly deaths were more numerous from this cause but in the last few decades the death rate has declined strikingly. There is no evidence that the disease is any less prevalent than in former years. It is present at all seasons of the year but reaches its peak in the winter. Infection is spread by previous cases.

Many, and perhaps the majority, of the cases show a very mild cough without any "whooping". These "missed cases" constitute a very important part of the reservoir in that they escape detection and circulate freely in the community to infect their fellows. There is no evidence that healthy carriers exist. The escape of the infective organism from the infected person is through the secretion of the upper respiratory tract. The organisms are more readily found in the early weeks of the disease. Isolation and quarantine, which are usually not instituted until the child "whoops" are of little value in preventing spread. Crowding and close association with the patient in the "pre-whoop" period facilitate rapid infection of others.

The seriousness of whooping cough is not due to the infection itself, but to the pneumonia attack sometimes following on the whooping cough infection. The best possible medical and nursing attention should be given to infected children during the first year of life and up to three years of age, since fatal cases are most likely to occur then than at later ages. This does not exclude the few cases who develop pneumonia at the later ages and who require medical and nursing attention. Over 60% of deaths occur in the first year of life, and over 90% during the first three years. There is no specific serum or vaccine of outstanding value which has been discovered so far for the effective treatment of the disease.

6. Erysipelas.

Of the other infectious diseases notified in 1945, there were five cases of erysipelas. A great majority of cases of this disease take their origin in an abrasion of the face or head. The starting point is often the inner angle of the eyelid or the neighbourhood of the nostril. Wounds on the hairy surface of the head sometimes develop erysipelas. With the exception of the newly born - in which an attack may be serious - the infection is rare in persons under fifteen years but becomes more common after twenty years of age. After fifty it is less frequently seen, but may occur in persons of seventy-five and over. It seems unduly frequent in alcoholics, possibly on account of the increased chance of injury and exposure to which this class of individuals is more liable.

Formerly about 5% of erysipelas cases became fatal, and the disease was very fatal to the newly born. After thirty-five years of age the morbidity tended to increase; after fifty it became serious, and it became dangerous in persons over seventy-five. The outlook in older children and in young adults is very favourable.

Serum now used in treatment of the condition has in some cases produced dramatic effects. Excellent results are obtained by the use of the sulphonamide drugs in combination with serum treatment, together with local treatment of the infected part. As a preventive measure in individuals who are prone to recurrent attacks, a course of vaccine treatment has been thought of some value.

Of the remaining notified infectious diseases in 1945, there was one case each of ophthalmia neonatorum, of puerperal pyrexia, and of cerebro-spinal meningitis. At no time were there any signs of a serious outbreak or epidemic, although there was a small outbreak of measles. Cases occurred sporadically throughout the twelve months.

SECTION V.

T U B E R C U L O S I S

Of the 10 cases of pulmonary tuberculosis admitted to hospital during the year 1945, 3 females were in respect of notifications received prior to the 1st January, 1945.

Among the deaths from pulmonary tuberculosis 1 male was notified previous to the 1st January, 1945.

1945 NEW CASES AND MORTALITY								
Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
0								
1								
5								
10								
15								
20	3	1						
25	5	2	1		1	1		
35					2			
45								
55	1	1			1			
65 and upwards						1		
Total	9	4	1	-	4	2	-	-

Thirteen new cases of pulmonary tuberculosis and one new case of non-pulmonary tuberculosis were notified to the Public Health Department in 1945, as against nine new cases of pulmonary tuberculosis and three new cases of non-pulmonary tuberculosis notified during 1944..

In 1945 there were six deaths from pulmonary tuberculosis as against five deaths in 1944 and there were no deaths from non-pulmonary tuberculosis in 1945 as against two deaths in 1944.

Tuberculosis is most frequently found in the lungs although it may attack almost any part of the body. Although the disease is an important cause of death, only a small percentage of those infected die of it. Many persons contract the disease and overcome the infection without any detectable symptoms and are never seen by a medical man. In infants, and occasionally in older persons, tuberculosis may run an acutely fatal course but in most persons it is a long drawn out chronic condition frequently punctuated by remissions.

The disease can be divided into two types - the primary infection and the re-infection.

The primary infection constitutes the initial response of the body to the infection and is usually manifested by a localised process in the lungs, such as a tubercle, or an infected lymph node near, or on the root of the lungs. In many instances this is a benign process, healing by fibrous tissue, encircling the affected part which is often followed by the deposition of lime salts around that part of the tissue where the affection is, in an attempt to cut off the tubercle bacilli in the part affected and thus prevent further spread.

In some instances the infection in persons experiencing their first exposure to tuberculosis progresses to a generalised involvement, miliary tuberculosis, usually ending with a fatal meningitis.

The re-appearance of the active disease in a person who has successfully combated the primary infection is referred to as the second type, that of re-infection.

The extent of the infection in a community varies with the degree of infection, economic circumstances, the facilities for the segregation of active cases, the discovery and segregation, if infected, of contacts of the active disease.

Due to circumstances obtaining in Lewes one would not expect a high incidence or a high mortality from tuberculosis in the town, and such is the case. As already pointed out in this Report, the mortality rate over a number of successive years in this area is much less than the mortality rate in an industrial area over the same period.

Non-pulmonary tuberculosis affecting other tissues than the lungs, such as the bones, joints, abdominal glands, etc., causes much crippling and disablement, besides terminating in some cases in a fatal issue. This variation of tuberculous infection is chiefly due to a bovine infection derived from tuberculous cows and spread through milk.

Pulmonary tuberculosis is not common among children, rather it is a disease of adults of earning age and capacity. Adults with the disease still continue to work in an unfit condition. If a wage earner so infected is declared unfit for work by his doctor, the family income is depleted. Unable to work the infected person stays at home and the chances of transmitting the disease to his immediate contacts in the home are thus increased. Legislation, intended as a temporary measure in war-time, to treat early cases of pulmonary tuberculosis and to grant financial allowances, was introduced in 1943. The chief idea behind the scheme was to improve or cure a patient of wage earning age and capacity so that he could resume vital war work. Chronic cases are excluded and so are non-pulmonary cases from the scheme. It is doubtful whether the scheme has been an unqualified success, since with the financial aid granted, the economic circumstances of the family was reduced in most cases.

Prolonged treatment over a considerable period of time of certain cases of bovine tuberculosis, as in some bone and joint lesions, is essential before a remedy is effected. This period may stretch into years. In these cases no financial help under the government scheme is given to sufferers who undergo treatment and no grant is given for chronic pulmonary tuberculosis cases, although the treatment may last in the aggregate many years. For a public health administrator the scheme has not been an easy one to handle, owing to the dissatisfaction expressed by chronic pulmonary cases and non-pulmonary cases.

Cleanliness, especially around cases, may destroy some of the pulmonary tubercule bacillus. The amount of infection spread through clothing, bedding, books and articles used by the patient is small in comparison with the spread directly from person to person. In pulmonary cases the escape of the bacillus is by the sputum. Better housing may reduce congestion and, therefore, the chance of spread.

The bovine tubercule bacillus is extruded in the cow's nasal and mouth secretions, in cow manure and in the milk. The most important environmental measures, besides the concurrent disinfection in the care of recognised cases, are those in connection with

the spread through milk. Heating up to 150° Fah. for 30 minutes, of a medium (such as milk), containing the bovine tubercule bacillus, will kill the bacillus. In order to improve the keeping quality of the milk, it should be immediately cooled to a temperature of not more than 55° Fah., or boiling the milk and then cooling it rapidly will produce the same effect.

Elimination of the common drinking cup and sanitation of eating utensils in pulmonary cases contribute to lessen spread. Treatment of these cases aims at the prolongation of the patient's life and the prevention of further spread.

Formerly sanatoria were simply rest houses where rest, nourishing diet, and graduated exercises with medical attention for the relief of symptoms were carried out.

Now treatment is concerned more with surgical procedure for the collapse and thus rest of the affected portions of the lung. Some favourable results have been reported by the use of Calmette-Guérin (B.C.G.) vaccine in conferring resistance to the disease. It has been administered principally to children in homes where known exposure to tuberculosis exists. Further experience with this vaccine is necessary before its true value can be measured.

In Lewes the social, domestic and occupational changes brought about by the war do not seem to have increased the incidence of or the mortality from tuberculosis, taking the war years together with the year 1945 into account.

A D D E N D U M.

NUTRITION.

As in the 1944 Annual Health Report, it was thought that some mention should be made of such an important subject in this year's Annual Health Report.

Diet may make or mar public health, as it may lower the standard of public health in many subtle ways. The modern conception of a good diet is that it must not only satisfy hunger, but it must provide a sufficiency of all the various substances as carbohydrates, proteins and fats to promote and maintain health and vigour. Further, it should supply a sufficiency of vitamins, salts and traces of metals which can only be obtained from a selected assortment of goods, some of which are unfortunately in short supply in many parts of the world to-day.

The monotonous sameness of the diet of people in this country has been the cause of much of the tiredness, apathy, lethargy, and short temper which has been so evident in recent times. This is omitting to mention the chief sufferer, the harassed housewife, who besides having most of the worry in foraging for the food, being given short supplies of fats and other essentials through rationing, has had to waste valuable hours shopping. The effect on her general health and well-being has been considerable. A good deal of the general unrest in this country, and in others, originates from an insufficient supply of a good, varied and wholesome diet. Health and vigour, the capacity to do a good day's hard work, the absence of irritability, and the feeling of healthy well-being, depend more upon the food we eat than almost anything else. A good varied diet is thus one of the most important things in the world.

From the public health standpoint, the absence of a good varied diet is likely to lower resistance to certain infections. It is unnecessary to point out the importance of diet in the prevention and treatment of rickets, tuberculosis, diabetes, kidney disease, gout, rheumatic affections, gastric ulcer and stomach affections, infantile diarrhoea and other affections, as it is common knowledge. It is true that the best medicine is found in good food rather than in chemists' shops.

In recent times, the knowledge of diet has grown at an amazing rate, and new discoveries regarding food and its effects have followed rapidly one after the other. It is a complex business. the modern science of dietetics, and there are many essentials necessary for a complete diet such as amino-acids, mineral elements, vitamins, carbohydrates and fats, and some factors so far undetermined. Most necessary, though modern research concerning diet is, and will be, most people are best served by a generous and varied diet, and by being able to eat what they fancy. How can the diet be made generous and varied? This is a big question at present receiving the close and constant attention of Nutrition Experts of the United Nations.

Since charity and many other worthwhile things begin at home, this country should make the production of food a matter of the highest priority. Agriculture should be put in its rightful place as one of the leading industries in the country. The production of more and better food in this island is an urgent necessity. Concerning the prolonged use of artificial fertilisers in this country, some disquiet is becoming evident. It has been well known for a long time that there is a relationship between the healthiness of the soil, the healthiness of plants, the health of animals feeding upon the plants, and the health of human beings who feed upon the plant and animal products. Some authorities,

with many years experience of practical farming, condemn the usage of artificial fertilisers outright as being productive of many ills, such as disease in plants and in cattle and in decreased yields of crops. Moreover, these authorities point out, quite rightly, that sewage is being wantonly wasted instead of being mixed with available vegetation of all sorts and kinds and made available to the farmer so that he could return valuable "natural" fertiliser to the land instead of using artificial fertilisers, productive of disease in plants and in animals, and in decreased crop yields. It is a fact that where "natural" fertiliser or "natural" compost is used (in short, humus or "muck"), the health of the farm animals, and of human beings living off the farm produce has attained and maintained a high standard. Some local authorities may think it worth while to make and sell pulverised waste obtained from sewage. In some cases where the sales of such "natural" fertiliser amount to some thousands of pounds yearly, the consequent lowering of the rates would benefit the community.

The subject of artificial fertilisers versus "natural" fertilisers is such an important one that much research regarding it is being carried out by a strongly sponsored independent body.

Besides the growing of healthy food to provide an adequate and sufficiently varied diet, there are other problems to be faced. These problems relate to the storage and distribution of good food, and the prevention of its waste.

In recent years, science has solved a lot of the problems concerning the storage of food, especially the readily perishable ones. It seems, however, that the present expensive, and often wasteful, methods of the distribution of food-stuffs requires overhauling, so that a cheaper and more rational system can be introduced. Despite the pious utterances and writings of politicians and of others, that they would not be, or should not be, parties to the ploughing in, or burning, of cereals and potatoes, and the dumping of unwanted fish back into the sea, this state of affairs still goes on in this and in other countries. Mankind has not yet attained sufficient wisdom.

It would appear to be wise and prudent to preserve foods produced abundantly at some seasons of the year so as to be available at seasons when there is no production. Also, surpluses above the real needs of any local population, or of any country, should be made available for other local populations, or for other countries, in exchange for either other food-stuffs or essential articles and goods of all kinds. The wastage of good food in order to keep the price up, or through lack of adequate storage, preserving, or transport facilities, is a cardinal sin. It cannot be emphasised too much or too often that the lack of a plentiful and varied supply of good food is one of the major causes of a lot of to-day's unrest. The transport and the processing of food so as to preserve it, is a great deal dependent upon coal production. If we cannot, or will not, supply the coal or petrol for transport, we will not obtain a really good varied diet. Likewise, if no coal is available for processing food, we cannot expect a supply in the lean times. Thus the actual coal producer has his part to play as well as the Government. Nothing short of strong legislative measures will ever stop the wanton waste to keep prices up.

It appears to all sensible people who have taken the trouble to really think about the matter at all, that we must depend more and more upon intensified agricultural and improved coal mining efforts, better methods of storage, of distribution, and of transport, with much more preservation of surpluses for some time to come. We cannot go on for ever relying on the generosity of our Dominions, but we must depend chiefly upon our own exertions.

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